

husband, Simeon Lincoln, an editor, died in 1823, and her second husband, Judge Phelps, of Vermont, in 1848. The larger part of her life has been devoted to teaching, and writing upon scientific and educational subjects. She was for some time editor of the *Patapsco Magazine*.

WE ARE PROMISED a handbook for self instruction in the practical details of microscopic botany adapted to both beginners and advanced students, by the renowned Dr. Edward Strasburger, professor of botany in the University of Bonn. It is entitled "Das Botanische Practicum," and is to deal with all sides of modern microscopical technique, even to the culture of bacteria, and at the same time to impart a general knowledge of botany. It is finely illustrated with 182 cuts, which, together with the material of the text, are almost entirely new, and specially prepared for the work. The author's knowledge in the most abstruse kinds of botanical research, such as the structure of protoplasm, etc., assures us a work of the highest value. It should be translated into English.

CURRENT LITERATURE.

Desmids of the United States and List of American Pediastrums, with Eleven Hundred Illustrations. By the Rev. Francis Wollé. Bethlehem, 1884. Svo. 168 pp. 53 col. pl.

The author has done a lasting service to microscopic botany by the publication of this excellent work. Such manuals in all classes of the lower plants are much needed, and it is gratifying to note the growing interest in this country in the study of microscopic plants, rendering publications of this kind possible by creating a sufficient demand to pay the cost of production, which is all the authors usually ask or expect. The work before us is a large octavo, well printed, substantially bound, and with fine illustrations. The preface is devoted to a notice of the collectors and systematists who have given attention to this class of American fresh-water algæ. Then follow some remarks on algæ in general, the collection and preservation of desmids, and the structure and reproduction of the same. Most of the remainder of the work is given to the descriptions and illustrations of the nearly five hundred species of desmids and ten of pediastrums. The two largest genera are *Cosmarium* and *Staurastrum*, embracing respectively 108 and 111 species. The only fault one is inclined to find with this part is the omission of full references to the sources of original publication of the species. To be sure the author has indirectly provided for this by giving a list of works consulted, but the direct references are still needed. One half the volume is occupied by the plates. These are well executed, and the sight of them is alone enough to awaken interest in the simple yet diversified and attractive plants. The drawing and engraving are both good, and the hand coloring, by permitting fine gradations in shading and unlimited variety in tints, gives a pleasing and natural effect. A good index completes the volume.

It would not do to close this review without calling attention to the remarkably low price (\$5.00) at which the work is offered. This has been made possible by the author assuming the responsibility of its sale. We hope his philanthropy may meet with fitting reward.